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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,209	02/12/2004	Lawrence Green	41914.710 / P0033870.00	3160
46333	7590	03/09/2010		
Medtronic			EXAMINER	
Attn: Noreen C. Johnson, IP Legal Department			CARTAGENA, MELVIN A	
2600 Sofamor Danek Drive				
Memphis, TN 38132			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,209	Applicant(s) GREEN ET AL.	
	Examiner Melvin A. Cartagena	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/25/10.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) 10,11 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,9 and 16-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 9 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,254,092 to Polyak in view of US 4,854,482 to Bergner.

Polyak shows a pumping system as seen in Figs. 10-13, having a fluid source 15 for selective pressurization, a hydraulic mechanism 14 and 23, an ergonomic pistol-grip handle 20, a trigger 21 pivotally mounted to an upper end of the housing, valves 2, see Figs. 7-9, to control the flow of the fluid, a connector 17, an actuator 10 located distal to the trigger for selecting pressure relieve and flexible conduits 37 and 38. The device of Polyak is operable by a single hand and is used to deliver the working fluid to a dispenser. Polyak is silent about bleeding air and fluid out external to the fluid source. Bergner shows a material dispenser as seen in Fig. 1 having valves 10 to vent air and working fluid out external to the fluid source. It would have been obvious to a person with ordinary skill in the art at the time of the invention to modify the device of Polyak by venting air and working fluid external to the fluid source to eliminate any air from the system as taught by Bergner.

3. Claims 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,254,092 to Polyak as modified by US 4,854,482 to Bergner as applied to claim 1 above, and further in view of US 5,015,233 to McGough et al.

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The Polyak-Bergner combination show all claimed features as discussed above but are silent about a syringe with a plunger connected to the pressure pump and the working pressure range of up to 5000 PSI. McGough show a syringe 12 having a plunger 10 connected to the pressure pump as seen in Fig. 1. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use a syringe with a plunger connected to the pressure pump of the Polyak-Bergner combination to dispense from the syringe with ease and control as taught by McGough.

In reference to claims 16 and 20, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Polyak-Bergner combination to work in any suitable pressure range, including 5000 PSI, since the pressure required to dispensed a product is a function of factors such as the required dispensed flow rate, type of nozzle assembly and viscosity of the material being dispensed.

4. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,254,092 to Polyak as modify by US 4,854,482 to Bergner as applied to claim 1 above, and further in view of US 4,250,887 to Dardik et al.

The Polyak-Bergner combination show all claimed features as discussed above but are silent about the length of the flexible tubing being long enough to permit a user to be outside of a radiation field of a patient being imaged. Dardik show a remote manual injecting apparatus as seen in Fig. 1, with flexible tubing 33 long enough to permit a user to be outside of a radiation field 10 of a patient being imaged 12. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to provide the device of the Polyak-Bergner

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combination with a long enough flexible tube to distance the operator from the radiation source and prevent exposing an operator to harmful radiation as taught by Dardik.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,254,092 to Polyak as modify by US 4,854,482 to Bergner as applied to claim 21 above, and further in view of US 4,776,618 to Barree.

The Polyak-Bergner combination show all claimed features as discussed except for a hollow housing for receiving the conduit with a ferrule and a seal surrounding and sealing the conduit against a set screw. Barree shows a sealing structure having a hollow housing 70, a ferrule 40, a seal 60 and a set screw 10 surrounding and sealing the conduit 20. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the sealing structure of Barree in the device of the Polyak-Bergner combination to provide the combination device with a coupling that can withstand very high pressures as taught by Barree.

6. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,254,092 to Polyak as modify by US 4,854,482 to Bergner as applied to claim 21 above, and further in view of US 4,823,588 to Bussereau et al.

The Polyak-Bergner combination show all claimed features as discussed except for a pressure release mechanism pivotally rotatable about a pin and a relief valve between the fluid source and the pressure mechanism for releasing the fluid back to the source when pressure exceeds a threshold. Bussereau shows a pneumatic hand actuated tool as seen in Fig. 2. having a pressure release valve 21 actuated by a lever 20 pivotal on a pin and a return valve on conduit 15. It would have been obvious to a person with ordinary skill in the art at the time the invention was

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made to use a pressure release and return valve in the device of the Polyak-Bergner combination to improve manual control of the pneumatic pump as taught by Bussereau.

Response to Arguments

7. Applicant's arguments filed March 31, 2009 have been fully considered but they are not persuasive. In response to applicant's argument that device of Polyak does not release a portion of the working fluid to an external source, the device Bergner is used to show that the device of Polyak could be modify to release working fluid external to the fluid source in application where contamination of the work environment is not compromised by the introduction of working fluid. In response to applicant's argument that the device of the Polyak-Bergner combination lacks flexible conduits with inlets and outlets, see the Polyak reference column 5, lines 46-54, where the use of flexible conduits with inlets and outlets is described.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on M-F (8:30AM to 7:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. C./
Examiner, Art Unit 3754

/Kevin P. Shaver/
Supervisory Patent Examiner, Art Unit 3754